SUPPLEMENT

SUPPLEMENT: SUPERBASE PERSONAL 2

This supplement contains information about a number of features in Superbase Personal 2 which could not be fully described in the User Guide.

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CUT AND PASTE

The Text Editor now includes Cut and Paste facilities. Text may also be moved to and from fields.

Mark Block ^L

You may mark the block to be operated on either by clicking with the mouse or with a click-and-drag procedure. Selecting the Edit menu option for Mark Block is the same as doubleclicking with the mouse, and marks the character under the cursor as the current block.

The click-and-drag procedure allows you to define a block by holding down the mouse button and moving the mouse. The area of the block islimited by the borders of the window. If you need to mark a block larger than the window, use the doubleclick or Ctrl key methods. Once a character is marked as a block, repeating the Mark Block operation using any of the three possible methods can have the following results:

- In front of the first mark, it extends the start of the block.
- After the first mark, it makes a new end to the block.
- Marked blocks are automatically saved with a Superbase text file.

Clear Block ^Q

This option removes any marked block from the text.

Cut ^K

Selecting Cut removes the marked block and reformats the text. The cut text is stored in the SCRAP.TXT file in the current directory unless you have specified a temporary directory in the Options dialog.

Copy ^R

Copy stores the current marked block in SCRAP.TXT.

Paste ^P

Paste inserts the text from SCRAP.TXT at the cursor position and reformats the text.

Cut, Copy and Paste with Field Data

The Ctrl key options are all available for use with text fields in database

records. You may only mark complete fields for Cut, Copy and Paste operations. Field data may be transferred from field to field within a record, as well as to and from the text editor.

VALIDATION HELP DIALOGS

On page 2-19 of the Superbase Manual, you will find an explanation of how to create your own Validation Help Messages. These allow you to define a single line message which explains exactly why the data is invalid. However, there are some circumstances in which a single line message is not very helpful.

An example would be the following validation formula which checks the data you enter against the data in another file:

```
LOOKUP(Stockcode.Invline,Stockcode.Stock) ELSE "Stock
code not found in Stock file"
```

When you enter the code for a stock item into the Invline file, the formula uses the LOOKUP function to check whether the code exists in the Stock file. The trouble is that if users make a mistake, it is probably because they are not sure what the code is for a particular stock item. Ideally, they should be shown a list of all the stock items in the file together with their codes.

This is just what validation help dialogs do. They display a list of all the acceptable data inputs, and allow the user to select an item by clicking on it (without having to type it in). To display a help dialog, you need to use the REQUEST command in your validation formula. For the example above, the formula would be:

```
LOOKUP(Stockcode.Invline,Stockcode.Stock) ELSE
REQUEST "Stock code not found","Select another stock
code",20,a%, Stockcode.Invline,40,Stockcode.Stock,
Description.Stock
```

When the user enters the wrong stock code, a dialog appears which lists the stock codes in the Stock file. To the right of the stock codes it also gives a description of the stock item; i.e., it shows the contents of the Description field for the associated stock code.

Provided the first field is an indexed field (in the example above, Stockcode.Invline), typing the first letter of the stock code would bring up a set of stock codes beginning with that letter. Alternatively, you can use the scroll bars or the cursor keys to scroll down the list.

Double clicking on any item in the list, then automatically places the item

into the field specified (again, in this example, the Stockcode.Invline field).

When you create the validation formula, it is important that you enter the correct parameters for the REQUEST command. The first two parameters specify the validation message. If you wish, you can leave these blank by entering two sets of quotation marks, so that the command starts with:

REQUEST "","", ...

The next parameter, 20, is compulsory but can otherwise be ignored. It does not make any difference to the way the dialog functions – but you must enter it in the formula. a% can be regarded in the same way. As an alternative to a%, you may simply enter a comma so that there are two commas next to each other after the number 20.

Following these, you enter the name of the field to which the formula is attached. The item you select will be entered into this field.

The next parameter (40 in the example) specifies the width of the dialog in terms of the number of characters. The remaining two parameters (Stockcode.Stock and Description.Stock in the example above) specify the fields which are to be displayed in the dialog. The first field is the one that will be selected for your data entry and is therefore compulsory. As an option, you may also specify one or two extra fields to provide the user with additional information about the data.

Note that the first field must be in the current file, while the other fields must belong to another open file.

PROCESS IMPORT

This option has several different applications. As a file conversion utility it takes a file created in another program and turns it into a Superbase file. It also allows you to read ASCII data into a Superbase file. Used in conjunction with Export, Import can also be used to transfer or add records from one Superbase file to another.

File Types

Superbase recognizes the following file types:

ASCII delimited files
ASCII fixed length files
Dbase '.dbf' files
Lotus files with extensions '.wks' or 'wk1'
Logistix '.lgx' files
DIF files

In ASCII delimited format, the data is stored as ASCII characters but the file also uses special characters (separators) to mark the end of each data item such as a field or a record. When you export records from a Superbase file, they are stored in this format in an ASCII delimited file.

In ASCII fixed length files each field and record occupies a fixed amount of space on disk and the data is stored as a continuous string of ASCII characters.

'.dbf' files are the Dbase equivalent of Superbase's '.sbf' files; i.e., this is the format used in Dbase II and III for standard database files.

The Lotus and Logistix formats are used for spreadsheet data files.

DIF is a standard format used by many software packages for exporting files. In this respect it is similar to ASCII format but has the advantage of allowing the file to be converted to the Superbase format in one step.

File Conversion

Files in the ASCII formats must be read into a pre-defined Superbase file. With the other formats, Import performs the conversion automatically and creates new '.sbf', '.sbd' and index files in the current Superbase directory. The new files take the same name as the file that has been converted.

When you import spreadsheet data into a database, each row is taken as a record, and the individual cells in a row represent fields. Any empty columns in the spreadsheet are ignored.

It is not practical to convert a spreadsheet file into a database file unless the data is structured as a series of repeated rows. Superbase allows you to convert a block in the spreadsheet grid by specifying a range of cells. You can also use a row of labels to define the field names in the Superbase file. If the spreadsheet labels are not specified, the fields take the grid's column letter with an underscore character added to it; i.e., all the cell data in the first column would be stored in a field named "a_".

Converting ASCII Files

To convert an ASCII file you must first create a new Superbase file to hold the data, so you must know the following information about the ASCII file's structure:

- The number of fields in a record.
- The number of characters in each field. For delimited ASCII files, this will be the maximum number of characters in a field.
- The type of data each field contains: numeric, string, date or time.

Now you can define a Superbase file (using the New File option on the Project menu) with the same structure.

Importing ASCII files: Prerequisites

- The file into which the data is to be imported is always the current file. Open this file before you select Import.
- The fields into which data is to be imported must be of the correct type: a numeric field for numbers, a date field for dates, etc.

You may need to remove Required field status and Validations temporarily with Project Edit.

You can specify that only certain fields are imported by selecting these fields in the Open Fields list (select Open Fields from the Project menu). If you are importing into just the set of open fields, Superbase will create records with the other fields left blank. Index entries for such fields may be created, but they too will be blank.

If you are importing data from an ASCII delimited file, you may need to specify which characters it uses as separators (or delimiters). Superbase assumes the field separator is the comma (ASCII 44) and that carriage return (ASCII 13) and line feed (ASCII 10) are used as the record separators. If the separators in the ASCII file are different from these, select Options on the Set menu and alter the separator values accordingly.

Using Import

Select Import from the Process Menu. Superbase displays the Import dialog. It shows the file type options with selection buttons to the left of them. Click on the button corresponding to the type of file you wish to import.

After selecting one of the spreadsheet types, you have the option of specifying the range and a label row. The first value for the range should be the coordinates for the cell at the top left-hand corner; the second value determines the bottom right-hand cell. Coordinates are entered in the conventional way for spreadsheets; for example, A12 or AF30.

If the range is not specified, Superbase converts the entire spreadsheet file. To specify that a row of labels will be used for field names, enter the number of the row.

ASCII Files Only

When you click on OK in the Import file type dialog, Superbase displays the Import Filter dialog. See Chapter 1 of the User Guide for an explanation of how Filters work. Build up your Filter Command Line in the normal way and click on OK.

Selecting the Import File

You will now be presented with a file selection dialog. If you have specified an ASCII format, it lists all the files in the current directory. Otherwise it only shows files of a particular type; i.e., if dBase is specified, the dialog lists files with the extension name '.dbf' (but it doesn't show the extension name).

You may also type in a path name and file name for a file in another directory, leaving out the extension name if it is not an ASCII file. Select the file you wish to import or convert and click on OK. For ASCII files this completes the procedure. If one of the file conversion types has been specified (dBase, Lotus, Logistix and DIF) Superbase displays a new index dialog where you can select the field or fields on which the new file is to be indexed.

PROCESS EXPORT

This function allows you to convert a Superbase file to a different format so that it can be loaded into another software package. Export offers the same range of formats or file types as Import including two ASCII file types. Even if the other program does not provide any file conversion facilities, it will almost certainly be able to accept ASCII files.

Preparing to Export a File

Before you select Export, you can specify which fields are to be exported, using the Open Fields option on the Project menu. In creating the new records Superbase will only take the data from the fields in the Open Fields list.

If you intend to convert the Superbase file into an ASCII delimited file, two further preliminary options are available:

- Field and Record separators. You may want to change the values for the field and record separators. To do this, select Options on the Set menu.
- Quotation marks. The Options dialog in the Set menu allows you to specify that every field exported is enclosed in quotation marks. This is necessary if the data contains the character used as a field separator; for example, addresses, dates or numbers may contain commas.

Using Process Export

Open the file you wish to export. Then select Export from the Process Menu. Superbase displays the Export file type dialog. Details of the different file types are given above. Note that the fields in ASCII fixed length files are exported in the format of the current file definition. If the data in a field is shorter than the length set in the file definition, Superbase pads it out with spaces.

Click on the button corresponding to the file type required. If you select a spreadsheet file type, you also have the option of specifying that the field names are included as a set of labels along the first row of the spreadsheet data.

Now click on the OK button. Superbase displays the Export filter. Use this to determine which records are to be exported. If you wish to export the entire file, leave the Filter Command line blank; otherwise, build up the Command Line in the normal way.

When you click on OK, Superbase displays the Export File Name dialog. Enter the name the file is to have when it has been converted. With ASCII files, you should supply an extension name. If you have specified a non-ASCII file types, do not include the extension name: Superbase adds it for you.

Superbase then processes the database file, checking each record to see whether it matches the conditions set up in the Filter. If it does, Superbase creates a copy of the data in the currently open fields and stores it on disk.

PROCESS COMMS

Select Comms from the Process menu. Superbase displays the communications parameters dialog. Before a file can be transferred, both users must set up all the parameters (except Comms port) in this dialog in the same way. For each of the following parameters you must select an option by clicking on its corresponding button:

Baud rate: 9600, 4800, 2400, 1200, or 300

Parity options: None Even Odd

Number of bits per character: 8 7 6 5

Stop bits: either 1 or 2 stop bits.

Comms port: 1 or 2, corresponding to the serial port used for the modem or connecting cable.

Transmit/Receive: Transmit to send a file, Receive to receive a file.

File Header: When this is set to On, Superbase transmits the file's name and the file is saved under this name at the receiving end. When File Header has been set to Off, the receiver specifies the name under which the file is to be saved. Superbase displays a file selection dialog before transmission takes place. If you are at the receiving end of the comms link, you must then enter a name for the file or select an existing name from the dialog panel. When the file is transmitted, the last 128 byte block will be padded out with zeros.

Auto-dial number: If your modem offers an auto-dial facility, you may enter the receiver's number in this box. See the Remote Transmission section on the next page.

Wild Cards

The MS DOS wild card characters, '*' and '?', can be used when you are selecting files for transmission. Thus if you wished to transmit all the files

that make up the Accounts database file, you would enter:

Accounts.*

This would transmit Accounts.sbd, Accounts.sbf and the Accounts index files.

Transferring a File

When both users have set the parameters in the comms dialog, they should click on OK. If you have selected Receive, the computer will then wait for a file to be transferred to it. If you are transferring a file, you will be presented with a file selection dialog for the files in the current directory. Select the file you wish to send and click on OK. Superbase will then transmit the file.

During transmission, a dialog appears on both machines showing the status of the transfer. It displays the number of blocks successfully transmitted or received, and indicates errors. Superbase uses the Xmodem protocol for file transfer. Each block of file data is checked for errors as it is transmitted. If errors occur, the block is transmitted again.

When the transfer is completed, the received file is stored on disk under the same name with which it was transmitted. You may experience problems transmitting files over the public telephone network at a baud rate higher than 1200. To reduce the number of errors, select a lower baud rate.

Remote Transmission

The procedure for sending files via modem is as follows:

1. Enter the receiver's number in the Autodial box in the comms dialog.
2. Select Transmit.
3. Set the other comms parameters for baud rate, port number, etc.
4. Click on OK.
5. Select the file or files (using wild cards) for transmission.

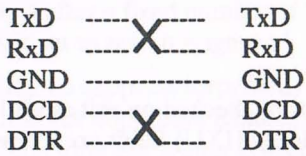
There is no Remote/Local option in the comms dialog. Provided the modem is on line and the DCD line is off, Superbase detects that Remote transmission is required and proceeds with the operation as soon as you have selected a file.

At the receiving end, you must select Receive and then set up the other parameters with the same values (except port number) as in the transmitter's comms dialog. If your modem has an autoanswer facility, turn it on. If it doesn't, the ring indicator line from the modem must be connected to the computer's RS 232 port.

Next, click on OK in the comms parameters dialog. If the File Header option has been set to Off, you will be presented with the file selection dialog where you can enter the name under which the file is to be saved. Superbase displays its 'busy' symbol and waits to be contacted by the transmitter. If the File Header option has been set to On, transmission will proceed as soon as the comms link has been established.

Cable Connections

The RS-232 connections needed for local file transfer are as follows:



The communications line is opened by raising RTS and DTR when OK has been clicked on in the comms parameters dialog. The transmitter will then wait up to 10 seconds for DCD and another 20 seconds for a NACK signal from the receiver. The receiver sends NACKs every 10 seconds and has a retry count of 10; i.e., it will time out after about 5 minutes. Comms transfer can be halted with ^C.

NEW FUNCTIONS

The following functions are either new or have had their syntax extended as described.

EXISTS

This new keyword allows a quick check to see whether a file exists on disk, or whether an index value exists in an index.

EXISTS (strexpr[,indexfield])

strexpr on its own is taken to refer to a file. Superbase checks to see whether the file exists and returns true (-1) or false (0) accordingly.

The index value check works on any index of any file, without reading a record. This allows you to see whether a specific key exists in

any index of the current file while you are editing that file.

EXISTS ("jones",lastname.ADDRESS) would look up "jones" in the Lastname index of the Address file, returning true if "jones" appeared in it,

false if it did not. The function is case insensitive, unlike LOOKUP. Partial matches return False. Note that if you combine EXISTS in a validation or calculation with some other function that does change the record pointer, the effect could be to overwrite the current record in memory.

FILE
This keyword may now be used to return the name of the current database file.

INDEX
This keyword may now also be used to return the name of the current index for the current database file.

MISCELLANEOUS

- Data Entry. Required fields are checked on exit as well as when you save the record. Unique indexed (IXU) fields are likewise checked when data is entered as well as when the data is saved.
- Mail Merge. Superbase recognizes a double ampersand (&&) in a text document as an intended single ampersand.
- The SER function is now handled differently by REORGANIZE. Numbers generated by SER in the new file continue from the highest number in the old file.
- If you try to print a line longer than the line length set in Superbase's Printer options, Superbase outputs a Carriage Return followed by a Line Feed when it reaches the maximum line length.
- The output format parameters BF, UL, IT enable you to set different print styles within a report or in the output from a query. If you wish to set other printing features, you can do so by using the CHR$ function to insert the appropriate printer control codes. In a query, you enter these codes in the query fields line. For example, on some Epson printers, the sequence 27, 14 selects enlarged print, and the control code 20 turns it off. To output the data for one field in enlarged print, your query Fields line might look like this:

  Firstname, Lastname, CHR$(27);CHR$(14);City;CHR$(20), Street

- File Names. Avoid using the characters : ? # / ; or the space character. When using a file name as an argument to a command such as OPEN FILE, it must always be inside quotation marks. However, a file name used to extend a field name, e.g. Name.Customers, need not be inside

quotes, unless it includes non-alphanumeric characters, i.e. other than a-Z and 0-9. Superbase supplies quotes when necessary during dialog selections, but if you type a command line in directly be sure to observe this rule.

- The window title bar indicates the current pathname as well as file.
- SB.PAR file. All communications parameters are stored.
- Labels dialog. There are two new parameters, Top Label Margin and Label Rows Before FF. These are for label printing on laser printers. Top Label Margin allows you to specify a vertical offset as a number of rows. Label Rows Before FF allows you to tell the printer to perform a form feed after a fixed number of label rows have been printed. If this is set to zero it is ignored.
- Printer handling. To suppress form feeds issued by some printer drivers the way in which Superbase handles the printer has been slightly changed. The first time the printer is used it is opened, and remains open until one of the following events occurs:

  Quit from Superbase
  Selection of the Set Screen menu option
  Any error
  Stop button is clicked or ^C is pressed